

### Childhood Obesity: the Maternal Relationship and its Influence

When picturing a relationship between a mother and child, one might imagine the typical scene of a mother providing nurturing care, comfort, and meeting the needs of the child. This scene may involve a mother rewarding her child with a candy bar or comforting her crying child by taking him or her out for ice cream. On the contrary, another scene may reveal a mother in a state of depression, who is neglecting her child who exhibits a desperate need for attention by begging his or her mother for food or other needs. In both of these scenes, previous research would suggest that these children have a high risk of being obese. Whether through food compensation, poor relationship quality, or other factors, research has shown that there is a link between mothers and child obesity. Over the past ten years, “obesity has increased at an alarming rate” and is becoming a growing problem in our country due to the health risks involved, including a “significant increase in morbidity and mortality in both adulthood and childhood” (Southwell, 2011, pg. 626). In addition, the increasing problem of child obesity has become a major health concern worldwide (Watanabe, Lee, & Kawakubo, 2011). For this reason, there is no surprise that much research has been done to determine what caused this increase in child obesity. There are many factors involved in child obesity, and studies have shown that mothers have a “significant impact on the food consumption, physical activity, and sedentary behavior” of their children that can lead to weight problems (Olvera-Ezzell, Power, & Cousins, 1990, pg. 3). Focusing on the maternal-child relationship associated with child obesity can lead to new preventative measures and solutions to this growing problem.

## **Scope, Causes, Contributing Factors**

As childhood obesity has become a major problem in the United States, research has been done to determine the factors that contribute to child obesity. My focus is on the mother's role in influencing and being a part of the cause of child obesity. There are many ways in which mothers can affect the exercise practices, physical health, and dietary habits of their children. Past research has indicated that there is a correlation between the maternal-child relationship and the social, cognitive, and emotional development of the child (Anderson et al., 2012). The reverse of this evidence reveals negative effects on the child's development due to a poor mother-child relationship. According to Anderson and colleagues (2012), a relationship between a child and mother that is in poor quality is associated with a higher risk of adolescent obesity. The relationship quality indirectly affects the prevalence of obesity by influencing the child's neurodevelopment, emotion regulation, and stress response (Anderson et al., 2012). Although the definition of a poor quality relationship between mother and child is vague, it could include excessive arguing and disagreements, lack of proper care, or even neglect and abuse. These negative factors present in a mother-child relationship could cause the child to deal with their emotions through excessive eating or refusal to partake in physical activities. The child may develop inappropriate and harmful ways to deal with stress that include overeating or other behaviors that can contribute to unhealthy weight gain. During early child development, the maternal-child relationship is especially important because the early years can be the most influential for a child. At an early age, the child is constantly learning from his surroundings and taking on new habits, which include diet and exercise behaviors. If the child develops unhealthy

habits at a young age due to a poor maternal relationship, these habits might be more difficult to break in later years and could lead to obesity.

Another factor that can be attributed to the mother-child relationship and child obesity is the status of “food security” that mothers feel (Martin & Lippert, 2012). Food security includes various levels that range from constantly worrying about the availability of food, to being continuously secure in regards to obtaining and affording sufficient food. Research has shown that mothers are subjected to reflect traditional gender expectations for their roles in the family, including the responsibility of “feeding the family” (Martin & Lippert, 2012, pg, 1755). This responsibility also contributes to children’s emotional needs for love, support and security (Martin & Lippert, 2012). Mothers might associate their children’s happiness and well-being with how much food they provide for their children during meals, especially if the family sometimes faces struggles financially. Overcompensation due to food insecurity could lead to weight problems for the child. Since the mother is overly concerned with not providing enough for her child, she may be blinded to the health risks for food overcompensation. According to Martin and Lippert (2012), very low food security is linked to being underweight. In contrast, low food security due to poverty is linked to obesity, especially in women, because those with economic strains are more likely to eat high-calorie but unhealthy and nutritious-poor food in order to satisfy hunger. These mothers are also more likely to eat irregular meals or skip breakfast (Martin & Lippert, 2012). Children might model this behavior and develop eating habits that could contribute to weight gain.

Other studies have investigated the measure of influence that mothers have in the way that children view obesity and people who are overweight. The attitude that mothers express towards their own weight is correlated to the attitudes that children show towards being fat

(Holub, Tan, & Patel, 2011). Not only do mothers' attitudes towards weight pass down to their children, but also mothers' actual eating and exercise habits can have a significant effect on those of their children. According to Southwell and Fox (2012), "dietary preferences and physical activities are likely to be shaped early in childhood and influenced by parental practices and familial environment" (pg. 627). When a child sees his or her mother engaging in binge eating or other harmful eating habits, he may see this as appropriate or even healthy because of the influence his mother has on him. Since mothers' attitudes toward food and nutrition are highly influential towards their children, those mothers experiencing food insecurity may pass down these unhealthy eating habits to their children. These habits produced by the mother may create a higher risk for the children to become overweight.

Certain characteristics that the mother exhibits towards her child have been shown to affect the child's risk of obesity. According to a study conducted by Campbell and colleagues (2010), maternal self-efficacy may have an important relation to the eating and sedentary behaviors of children. The study found that mothers with relatively high self-efficacy were more likely to exhibit protective behaviors against obesity for their children. The results showed that mothers with greater ambition and confidence in themselves were more likely to promote healthy dietary habits for their children. The children of these mothers showed "significantly higher consumption of vegetables in both age groups" and "increased reported consumption of fruits and water with reduced consumption of cordial and cake" (Campbell, Hesketh, & Silverii, 2010, pg. 506). This study shows how a mother's own confidence in herself can have an effect on the dietary habits of a child that ultimately determine his or her weight status. These findings could be further tested to investigate if low self-efficacy in mothers could potentially lead to weight problems in their children. One might argue that a mother with low self-confidence would have

less motivation to exert effort in providing healthy food options for her child or encouraging active play.

Another contributing factor in linking mothers to child obesity is the notion that mothers may become unaware of their children's nutritional health problems due to being overly nurturing and submitting to their children's wants and needs. Mothers tend to offer rewards to children in the form of treats, such as candy, cookies, and other sweet foods. While this gesture may seem to be an innocent act of praise by the mother, rewards in the form of food can be considered a major factor in unhealthy weight gain for the child. Some children may not be negatively affected by being given sweets from time to time, but when done excessively, this maternal action can aid in the weight progression of those children already prone to obesity. Numerous studies have shown that mothers of overweight or obese children tend to underestimate the weight of their child. According to Holub and colleagues (2011), many mothers do not see their own children as overweight, even though they can usually recognize obesity in someone who is not their own child. Reasons for this bias could include that mothers don't want to be critical towards their children or that they fear having to "face the issue of how feeding their child is potentially emotionally rewarding for them" (Southwell & Fox, 2011, pg. 628). A mother may feel that if she acknowledges the weight problem of her child, the blame will be put on her maternal skills. This blame may be too threatening to a mother, causing her to ignore the fact that her child is at risk of obesity. Whether it is the quality of relationship between a mother and child, the mother's own dietary and exercise styles being mirrored by her child, or the emotions and responsibility a mother feels towards her child, sufficient research has shown the prominent influence mothers have on childhood obesity.

## **Controversies, Preventative Measures, Solutions**

Many controversies exist over the main causes of child obesity alone. Some argue that child obesity is the fault of the media, government, fast-food restaurants, schools, and many other relevant influences. Other controversies exist over how the childhood obesity problem should be addressed and potentially solved. These arguments include how involved schools should become in preventing child obesity, how to involve parents and families in dealing with obesity, and how to encourage healthy eating and physical activity in children in the best way possible (O'Dea, 2006). In terms of maternal involvement in causing childhood obesity, there is controversy over the degree to which mothers are involved and if they have influence at all. Some arguments point out that it is mainly the mother's responsibility to control her child's eating and physical activity, while other viewpoints indicate that the mother is hardly involved in childhood weight problems at all.

Since research indicates mothers do have involvement in child obesity, preventative measures that involve the mother can be taken to reduce this problem. These preventative measures include informative programs during pregnancy, improved interventions, maternally focused advertising for healthy foods, and programs that address the mother-child relationship quality directly. Research has shown that a child's early environment, especially their home setting, has an effect on whether they will develop obesity or not. This environment includes their food accessibility and security, food preference development, and physical activity (Water, 2011). A way to prevent the onset of obesity in children would be to create information sessions and classes for pregnant women and their spouses to inform soon to be mothers of ways to ensure a healthy life-style and early childhood environment for their child that can reduce the risk of obesity. A study conducted by Southwell and Fox (2011), revealed the idea of

“celebrating weight gain” in which mothers of new infants associated having a “big baby” with being a good mother (pg. 632). Some of the mothers in the study valued their worth against “what they could provide for their child in terms of food and how much weight their baby gained” (Southwell & Fox, 2011, pg 632). This association mothers feel with having a well fed, healthy baby can sometimes carry over into early and late childhood. While it is important for new mothers to be aware of their infant’s nutritional needs, mothers should be informed of the changes that must be made and dietary adjustments as the child grows out of infancy into toddlerhood. By providing information to women before they have their children, it is possible to stop obesity before it occurs by giving children healthy living environments at the very beginning of their lives.

Another plan for prevention involves improving the overall programs used to educate parents on how to keep their children healthy. As mentioned earlier, maternal self-efficacy plays an important role in encouraging healthy weight in children. This finding can be used as a way to improve child obesity prevention interventions by placing focus on the mother’s confidence and determination. Campbell and colleagues (2010) suggest that “parental support around promoting healthy eating and reduced sedentariness will need to encompass more than the translation of knowledge” (pg. 506). Intervention programs should aim to strengthen and maintain the self-efficacy of mothers in these areas. Providing knowledge of recommendations for food group portions, how to buy and prepare nutritional food, and other skills can help improve self-efficacy for mothers. By strengthening mothers’ knowledge about these vital health topics for their children, they will better be able to implement healthy lifestyles for their children. Research also stresses the importance to include strategies for how to handle food refusal by children and demands for other food (Campbell et al., 2010). These intervention programs should also provide

fun ways for mothers to engage in physical activity with their children, rather than participating in activities that involve little to no body movement. The activities promoted should also contain aspects that will help improve cognitive development, since mothers may see exercise and physical play as mindless activities. This knowledge should be presented in a way that is easy for mothers to understand and is relatable to them. The study conducted by Campbell and colleagues (2010) also indicated that it is important to engage with mothers about healthy choices for their children through intervention programs when the mothers' self-efficacy is high. Since the self-efficacy in mothers is usually higher when the children are young, intervention programs should start early in a child's life at the first signs of unhealthy weight (Campbell et al, 2010).

Another means for improving childhood obesity intervention programs involves not only providing knowledge of proper nutrition and activity for children, but addressing the emotional influences on unhealthy weight gain involved between the mother and child. Anderson and colleagues (2012) report that obesity prevention interventions could place more emphasis on the actual quality of maternal-child relationships in order to help prevent weight problems for the child. Rather than just focusing on the child's physical and nutritional needs, mothers should also work to improve the relationship with their child on an emotional level. As previously stated, a high-quality maternal-child relationship has been shown to indirectly prevent obesity. These interventions might be more appealing to parents by focusing on "energy balance" and offering "additional benefits to children's health and well-being aside from maintaining a healthy weight" (Anderson et al., 2012, pg. 138). Mothers might be more accepting and willing to take the advice from these programs and interventions if they are not solely focused on children's weight, but rather other positive consequences that come from providing healthy lifestyles for their children. These positive consequences might include higher self-esteem, more energy, or better overall



health. Considering a mother's general desire to improve her child's well-being, programs that approach child obesity prevention in this way might be more successful.

To address a mother's need to reward her child but avoid supplying children with unhealthy sweets, food companies could develop new snacks and treats that are more nutritional and not filled with sugar and fat. Research has shown that the types of foods made available to children have an effect on the risk for child obesity (Fraser, Skouteris, McCabe, Ricciardelli, Milgrom, & Baur, 2011). While these products may already be on the market, companies could change their advertising tactics in order to have the healthy treats appeal more to children and mothers. Advertising companies could develop commercials and magazine ads that show a child enjoying a healthy snack just as much as he would a fat-filled sweet. Since mothers are usually the ones who shop for groceries in families, advertising strategies for healthy child snacks that directly target mothers could increase sales of nutritional snacks over unhealthy ones. This new approach would not only help the food companies, but also provide a healthy source of reward for the mother to give her child that would satisfy them both.

Solutions to children already living with obesity include that mothers first identify if their child has a weight problem, and then take the steps to address it. Some research suggests that addressing the quality of the mother-child interaction and mechanisms that involve stress response and emotion regulation that can affect children's weight is a good start to dealing with obesity. According to Anderson (2012), "having a high-quality maternal-child relationship contributes to the cognitive, social, and emotional outcomes that most parents want for their children" (pg. 136). The relationship quality between a mother and child could help the problem of obesity by influencing the child's "capacity for emotion-regulation and response to stress" (Anderson et al., 2012, pg. 137). As mentioned previously, a mother's own eating habits and

physical activity have an influence on that of the child. If programs were developed to inform and educate mothers on the importance of staying healthy in terms of nutrition and exercise, these habits could carry on to their children who may be suffering from obesity.

### **Conclusion**

As discussed previously, child obesity is a growing problem in the nation that needs to be addressed in order to prevent serious health risks in children and adults. While there are many causes of obesity in children that have been observed and studied, the mother-child relationship and interaction is one that should not be ignored. Those working to solve the issue of child obesity should recognize that mothers play a large role in the overall health of their children, whether it be by preventing or indirectly causing child obesity. Mothers are a major influence in children's lives by affecting their eating habits, activity levels, and cognitive perception of food. While the degree to which preventative measures should be taken and solutions formed is controversial, it is clear that a key way in approaching child obesity is to target the mother-child relationship. By putting these solutions into action, hopefully in the future the typical mother-child relationship will involve a healthy, happy child with no weight problems and a mother who can gladly take credit for it.

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